224/318

751,080 COMPLETE SPECIFICATION
2 SHEETS
This drawing is a reproduction of the Original on a reduced scale.
SHEET 1

FIG.1

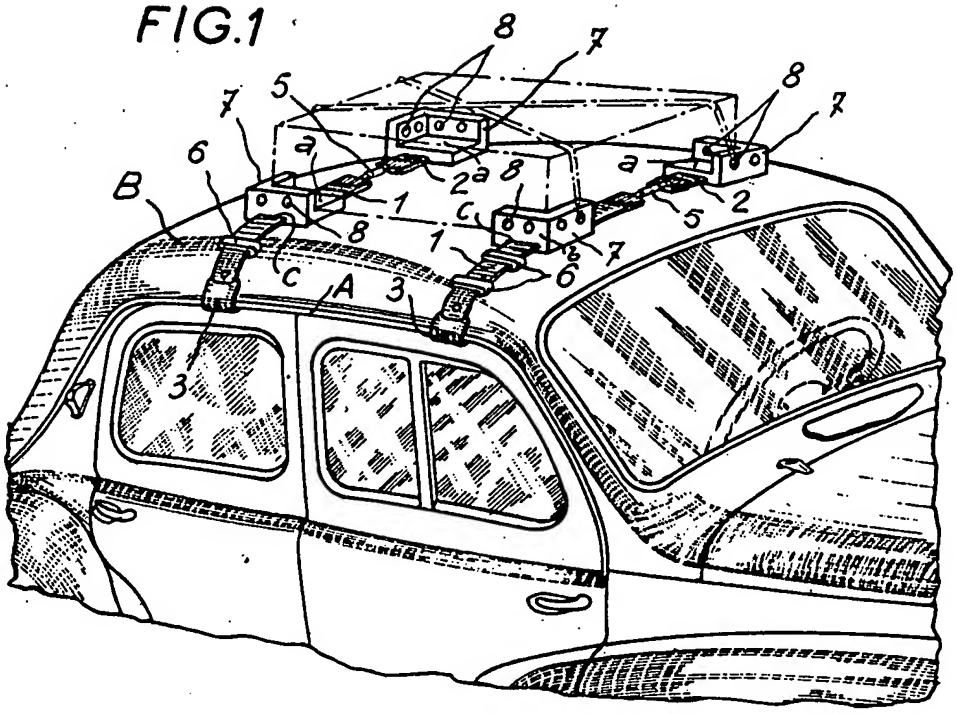

FIG.2

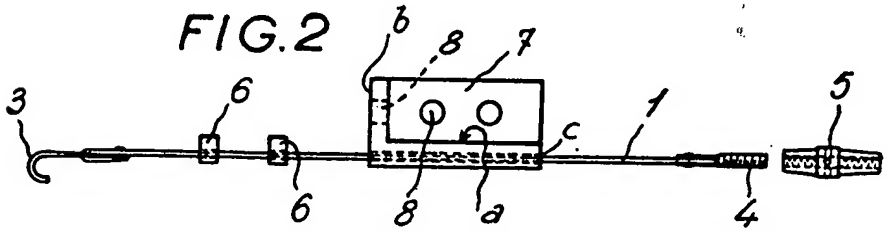

FIG.3

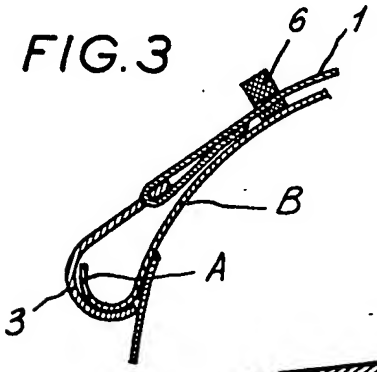

FIG.5

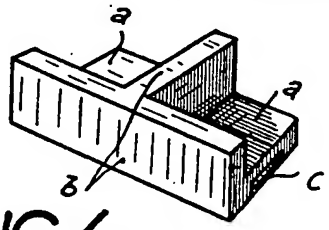

FIG.4

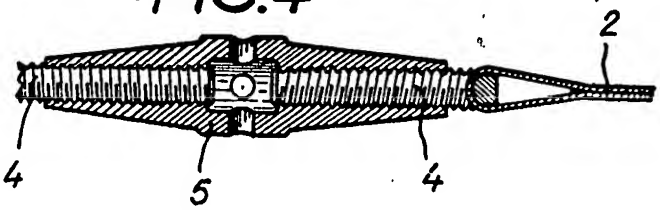

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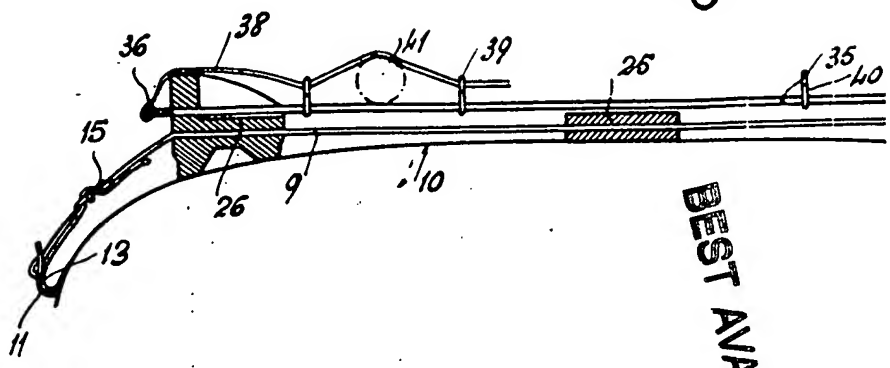
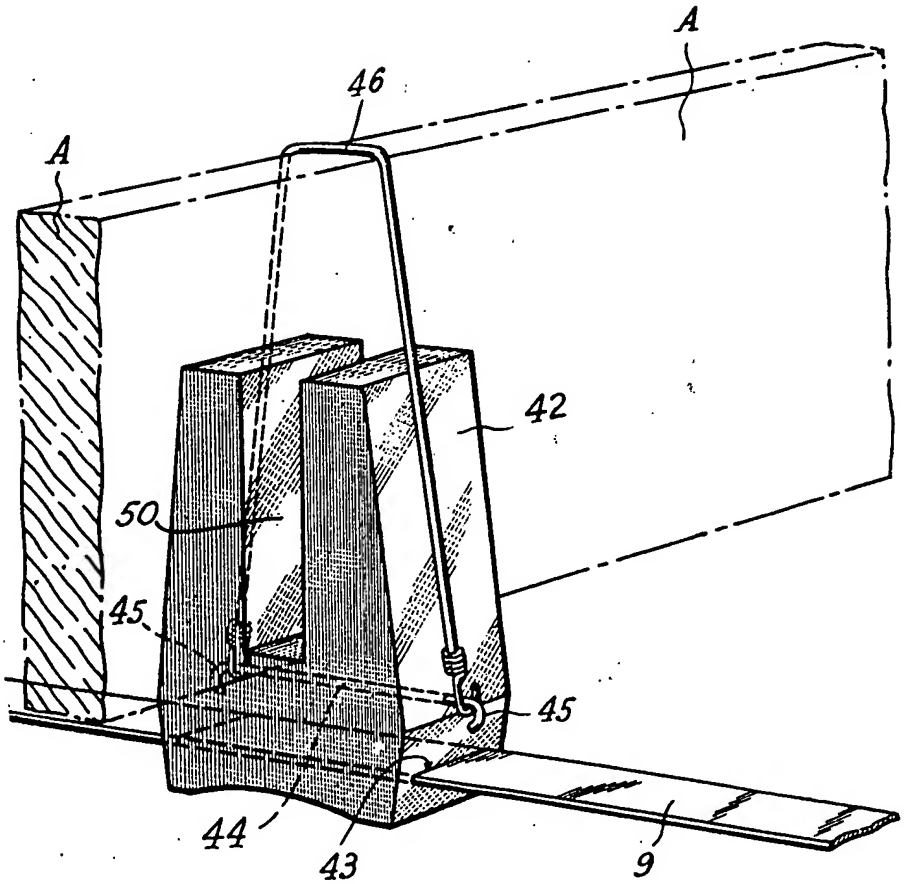
Fig. 6



SEE SHEET 1

Fig. 10



June 27, 1956

224
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751,080 COMPLETE SPECIFICATION
2 SHEETS
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SHEET 2

Fig. 6

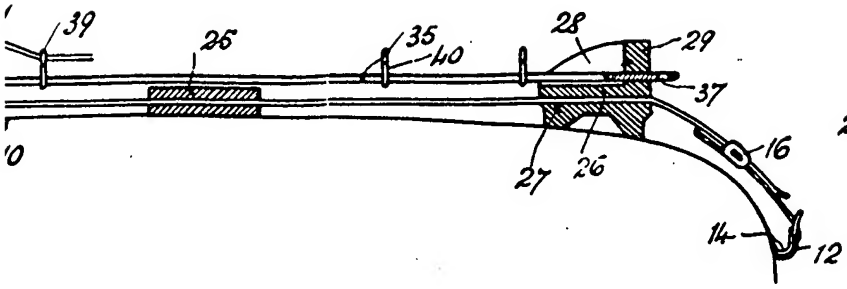


Fig. 7

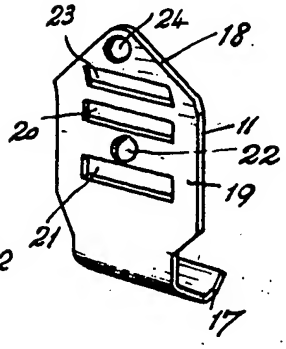
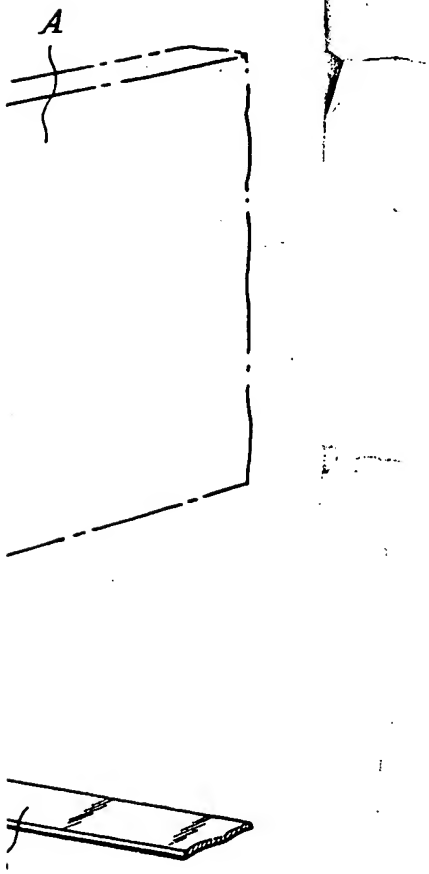


Fig. 8



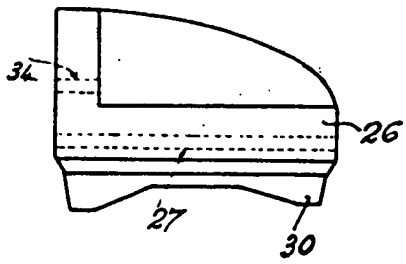
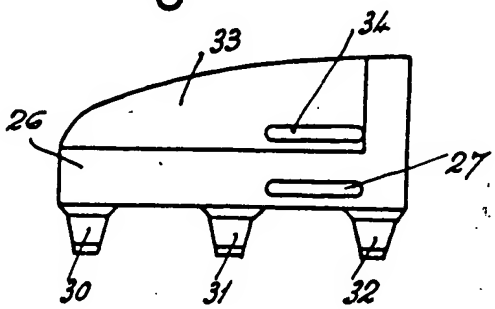


Fig. 9



PATENT SPECIFICATION

751,080

Date of Application and filing Complete Specification: Sept. 2, 1954.
No. 25532/54.
Application made in France on Sept. 2, 1953.
Application made in France on April 3, 1954.
Application made in France on August 9, 1954.
Complete Specification Published: June 27, 1956.

Index at acceptance:—Class 103(2), C4.

COMPLETE SPECIFICATION

Luggage Carrier

We, SOCIETE DU CAOUTCHOUC NORMAND, a body corporate organised under the laws of France, of Neufmarche & Seine-Inferieure, France, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The present invention relates to a detachable luggage carrier for vehicles; and as commonly used on motor cars, being attached to the roof.

The luggage carrier device of this invention is constituted essentially of at least two slats, of metal or other flexible material, which are secured transversely of the roof of the automobile such as by means of hooks provided at their ends which engage beneath the roof gutter which extends along each side of the body, spacing members being provided and carrier blocks adjustably carried on the slats and adapted one in conjunction with the other to provide a seating for an article or articles of luggage.

Each slat is preferably made in two parts, joined end to end by a turn-buckle to enable adjustments to be made to accommodate the slat to different sizes of roof and to facilitate dismantling. Alternatively each slat is constituted by a strap.

luggage carrier may be constituted by the combination of two slats which form transverse end supports for the luggage carrier, with their four corner angle-blocks which form the four angles of a virtual rectangle, in which the piece of baggage to be accommodated is located at each of its four corners, and the length of which can be modified as desired by moving the two slats towards or away from one another while the width of the same can be modified as desired, by moving the corner blocks—in opposite directions—towards or away from one another on each slat.

In another embodiment, at least one intermediate slat is provided which carries either carrier blocks of L cross section similar to angle-irons, or blocks in the form of a double angle-piece, that is to say blocks the projecting part of which is in the form of a T and which permit the supporting of two parcels placed end to end or side by side. These double angle-pieces can likewise be provided, like the angle-irons, on the end slats.

According to another embodiment of the invention the flexible slat comprised by each constituent part is formed by a single strap, which is advantageously non-extensible, of textile material, plastic, or other material. This strap is passed through apertures which are provided in the base of the carrier blocks.

It is advantageous for the strap in question to be adjustable in length, and it is preferably provided at one end with an ordinary buckle and at the other end with a hook or wedge-type buckle. This enables it to be fitted to cars of different widths, and at the same time, to be removed and placed in position instantaneously. Each end of the strap may terminate in a hook which has in addition at least one aperture to permit the fixing of a strap intended for strapping the luggage.

According to another feature of this invention, in at least one of the upstanding edges or walls of the carrier blocks and above the upper surface of the base of said block, there is provided an aperture which can also serve for strapping the luggage and which can be used to receive the ends of a bar on which hooks may be threaded. The bar in question can serve as a support for the transport of articles of considerable length, such as luggage, skis, canoes, etc., the hooks serving as attachment points between each object, for a securing strapping which may, for example, be elastic.

In another modification of the invention, projections intended to bear on the body of the vehicle are provided beneath the underside of the base of each carrier block. The

[Price 3s. 0d.]

projections of one and the same member preferably being of different lengths to enable them to fit the curvature of the roof. This feature has the particular consequence that the carrier members themselves can be made of any material, provided the projections are of rubber or similar material possessing a certain degree of flexibility.

In a general way, the carrier blocks may have a flat section or any other shape, depending on the structure of the luggage to be transported, particularly a U-shaped section, so as to permit the edgewise accommodation, between the two limbs of the U of two carrier members, disposed towards the two ends of the roof of the vehicle, of skis, boards, or other generally long objects which it is advantageous to transport edgewise on the roof of the vehicle.

The invention is illustrated in the accompanying drawings in which:—

Figure 1 is a view in perspective showing a motor vehicle with the luggage carrier in position on the roof,

Figure 2 is a view in elevation of one of the two parts of one of the slats of the luggage carrier;

Figure 3 shows in section the hooking of a luggage carrier slat on the gutter of the motor vehicle;

Figure 4 is a view in section of the sleeve assembling two parts of a slat of the luggage carrier;

Figure 5 is a view in perspective of a double angle-piece;

Figure 6 is a general view in section of a constituent member of the luggage carrier according to the invention;

Figure 7 is a view in perspective of one of the hooks of the strap;

Figure 8 and Figure 9 are views in elevation, at right-angles to one another, of a carrier member;

Figure 10 is a view in perspective of another form of carrier member.

1 and 2 are the two component parts of a metal slat, the two parts which are identical being fixed transversely, one at each side on the roof of the motor vehicle.

Each part terminates at one end in a hook 3 adapted to hook beneath the roof gutter A of the body B of the motor vehicle (see also figure 3) and at the other end in a screw-threaded rod 4. The rods 4 of the two parts 1 and 2 have screw-threads of opposite pitch.

The two metal slats are connected end to end by means of a sleeve 5 which is provided with two opposite internal screw-threads, and form a turn-buckle so that by screwing it onto or off the threaded rods 4, the latter will be drawn towards or separated from one another, hence enabling the slat to be shortened or lengthened.

On each section 1—2 of the metal slat there are mounted, so as to be a tight frictional fit, spacing rings 6 and corner angle-blocks 7, of suitable material e.g. hard rubber. Each corner block comprises a base a on which will rest one corner of a piece of luggage, and upstanding side edges b, against which is located the side walls of said piece of luggage (trunk or other article). Slots c are cut in the corner blocks through which the slats are threaded, similar slots being provided in the spacing rings 6. Holes 8 may be pierced in the sides b for the passage of ropes or straps to secure the luggage placed on the carrier.

The corner-blocks 7 of the two sections 1 and 2 of a slat are arranged to face in opposite directions, so as to form with the two corner blocks of the other slat the four corners of a virtual rectangle, the length and width dimensions of which may be adjusted by suitable spacing of the metal slats 1, 2 and by sliding the corner blocks 7 along the slats, as required by the luggage to be carried. As can be seen from figure 1, which shows the luggage carrier in position on the roof of a motor vehicle with a suitcase roped in position, the carrier is readily removed and can be folded into sections of slat, which can be folded up and stowed away for transport and storage.

Between the corner blocks there may be fitted one or more double angle-pieces or corner blocks such as those illustrated in figure 5, which likewise are slotted to receive the slats. In this case the side edge b has a central rib b to divide the block into two so that as seen in plan the side edges are T-shaped.

Various combinations can be obtained with these corner angle-pieces and double angle-pieces thus permitting the accommodation on the roof of a vehicle of any number of parcels each parcel being supported at its four corners.

Referring now to figure 6 a constituent of the luggage carrier device comprises a single strap 9 which is fitted transversely on the roof panel 10 of the vehicle and the ends of which are fixed by hooks 11, 12 to the roof gutters 13—14 of the vehicle. Adjacent one end the strap has a buckle 15 and at the other end a turn-buckle 16, which permits of adjustment of the length thereof of the strap according to the width of the vehicle. It will be understood that in this manner a single luggage carrier can be adapted to a large number of bodies, whatever their shape and width.

The hooks 11, 12 are preferably constructed in the manner shown in figure 7 being in the form of a plate curved at one end as at 17 to constitute the hook proper which engages beneath the roof gutter, and having the other end 18 curved in the opposite direction. The body 19 of the hook has two slots 20, 21 for the passage and fixing of the metal strap 9, a hole 22 being provided to enable a rivet to be used to secure the strap to the

hook. In the curved part 18 there is preferably provided a third slot 23 intended for the passage of a strap for securing the luggage when in position. An aperture 24 may also be provided to receive a hook should an extensible spring be used to secure the luggage instead of a strap. Both the buckle 15 and the turn-buckle 16 can be of any well-known type.

Spacing blocks 25 are mounted on the strap 9 to avoid any rubbing between the strap 9 and the body of the vehicle, and to serve as a point of support for the luggage. The carrier blocks are indicated at 26, and are similar in shape to those illustrated in figures 1—5.

Similar to the corner blocks shown in figures 1 to 5, the blocks 26 have a slot 27 for the passage of the strap 9 and are provided with two right-angled raised edge walls 28, 29 as shown in figures 1 to 5, or a single raised edge such as 29 or, alternatively, two edge walls disposed in the form of a T or double T.

In this embodiment of the invention the underside of the block 26 (figures 8 and 9) is provided with projecting feet 30, 31, 32 which can consist of cylindrical studs or, as illustrated, of bars. These support feet enable the surface of contact between the carrier members and the roof of the body of the vehicle to be limited and better contact is obtained, particularly with steeply curved roofs. The outer feet 32 preferably are longer than the feet such as 31, to enable them to adapt themselves more closely to the curve of the body.

A second slot or aperture 34 may also be provided in the side 33 which can be used for the passage of a strap intended to secure the luggage. As shown in figure 6, it can also be used to support the ends of a rod 35 which is passed through the apertures 34, the rod serving as a support for any bulky parcel e.g. a ladder, a canoe, a pair of skis, and so on. In the ends of the rod 35 there are advantageously provided apertures 36, 37 for attachment of an extensible spring 38 which can be anchored to the rod 35 by hooks 39, 40. This extensible spring will serve to fix any objects being transported on the carrier such as 41 which are supported on the bar 35.

Figure 10 shows a modified design of carrier member 42 which is of U-shaped section.

This carrier member is slotted as at 43 to enable it to be mounted on the metal or other slat 9 but instead of being shaped to form a corner block it is grooved at 50 to provide a mounting for articles e.g. skis, boards. This enables any long objects A to be held edgewise between the limbs of the groove 50, and between those of the groove of another similar carrier member threaded on to a slat or strap at the other end of the roof of the vehicle.

A rod 44, provided at its ends with hooks 45, eyelets, or other means, may be threaded through an aperture in the carrier member 42, above the slat or strap 9, in order to provide an anchorage for the ends of an extensible spring 46 or a fixing rope passing around the skis or other objects A to hold them in position.

What we claim is:—

1. A luggage carrier device comprising two or more slats of metal or other flexible material adapted for attachment to the roof of the vehicle e.g. by hooks, and provided with spacing members and having carrier blocks adjustably mounted thereon and adapted in conjunction one with the other to provide a seating for an article or articles of luggage.

2. A luggage carrier device as claimed in claim 1 in which each slat is formed in two portions connected to one another.

3. A luggage carrier device as claimed in claim 2 wherein the two parts of each slat are adjustably connected by means of a turnbuckle.

4. A luggage carrier device as claimed in claim 1, 2 or 3 in which the spacing members and/or carrier blocks are of hard rubber.

5. A luggage carrier device as claimed in any of claims 1—4 characterised in that the carrier blocks are provided with upstanding edges or walls for locating an article of luggage in at least two directions.

6. A luggage carrier device as claimed in claim 5 in which the edges of the carrier block form a right angle.

7. A luggage carrier device as claimed in any of claims 1—4 in which the carrier blocks are grooved.

8. A luggage carrier device as claimed in claim 5, 6 or 7 wherein one or more strap or rope holes are provided in the edges or walls of each carrier block.

9. A luggage carrier device as claimed in any of claims 1—8 in which the slat fixing hooks are formed with at least one aperture to receive a rope or strap for the luggage.

10. A luggage carrier device as claimed in any of claims 1—9 in which a bar is supported by the carrier blocks.

11. A luggage carrier as claimed in any of claims 1—10 comprising carrier blocks formed or provided on their underside with feet of varying heights.

12. A luggage carrier device as claimed in claim 11 in which the carrier blocks are formed of non-resilient material and the feet

are of rubber or like non-abrasive material.

13. A luggage carrier device substantially as described with reference to the accompanying drawings.

CARPMAELS & RANSFORD,
Agents for Applicants,
24 Southampton Buildings,
Chancery Lane, London, W.C.2.

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